

# ICL2024 Special Session Call for Papers

## **Title**

*Building Blocks of STEM: Developing and Sharing High-Quality OERs*

## **Acronym**

OER4STEM

## **Overview**

Science, Technology, Engineering, and Mathematics (STEM) education faces a critical challenge: ensuring equitable access to high-quality learning materials while fostering a dynamic and engaging classroom environment.

Open Educational Resources (OERs) offer a powerful solution, but their effectiveness hinges on strategic development, effective dissemination, and robust quality assessment.

This special session will delve into the strategic development, effective dissemination, and robust quality assessment of Open Educational Resources (OERs) specifically designed for Science, Technology, Engineering, and Mathematics (STEM) education.

The session will explore how to leverage appropriate repositories and social media promotion to connect OERs with a wide audience of educators and learners. Additionally, ongoing maintenance strategies will be addressed to ensure the continued relevance and usability of these resources.

Furthermore, the session emphasizes the crucial role of quality assessment in maximizing the impact of OERs.

Expected Outcomes:

This special session aims to:

- Foster collaboration and knowledge sharing among educators regarding effective OER development, dissemination, and quality assessment in STEM fields.
- Promote the wider adoption and integration of OERs in STEM education to improve accessibility and affordability.
- Identify best practices and challenges in the OER development process specific to STEM education
- Identify the best ways to support and promote Sustainability through OERs

By contributing to this session, participants can showcase their expertise in OER development, dissemination, or quality assessment. They can also network with a community dedicated to advancing STEM education through Open Education and contribute to a more equitable and accessible future for all STEM students.

This call to action invites a diverse range of contributions, including research papers, case studies, and practical guides, aiming to foster a vibrant conversation on OERs and their potential to transform STEM education.

## Topics

**Crafting Effective OERs:** Share best practices for developing OERs that align with STEM curriculum standards, integrate engaging activities, and cater to diverse learning styles.

**Dissemination Strategies for Maximum Impact:** Explore innovative approaches to sharing OERs with a wider audience. Discuss the role of repositories, social media promotion, and ongoing maintenance strategies.

**The Art of Quality Assessment for OERs:** Examine established frameworks for STEM OERs. Discuss the importance of peer review, student feedback mechanisms, and analytics to ensure quality and effectiveness.

**Promoting Sustainability through OERs:** Explore how OER can be used to promote sustainability. As the use of OER continues to grow, we can expect to see even more innovative ways to use OER to support sustainability education.

## Program Committee

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